

REMARKS

In the Office Action dated November 26, 2003, the Examiner rejected pending claims 1-19. The present Amendment and Response is timely filed, since the due date for reply without extensions is February 26, 2004.

Applicant has cancelled claims 1-13 and 15, amended claims 14 and 17-19, and added new claims 24-29. All amendments and additions are supported by the specification as filed, and as such add no new matter. For example, support for the new and amended claims may be found at: page 4, lines 3-16; page 6, lines 11-12 and 19-21; page 7, lines 3-9; page 8, lines 3-6; page 9, line 6 – page 16, line 3.

A. Restriction requirement

The Office Action states that the application as filed consists of four distinct inventions: Invention I (claims 1-19), Invention II (claim 20), Invention III (claim 21), and Invention IV (claims 22 and 23). As such, restriction for examination purposes is proper.

Applicant elects to pursue Invention 1 (claims 1-19). Claims 20-23 are withdrawn from consideration. This affirms the provisional election made during a phone conversation on 11/19/03 between Examiner and Michael J. Wise.

B. Claim objections

Claims 12, 13, 15, and 17-19 are objected to for informalities. Claims 12 and 13 depend on claim 10, which does not require cartilage cells. Claims 15 and 17-19 depend on the method of claim 13, which does not require a method.

Applicant has cancelled claims 12, 13, and 15, rendering the objections moot with regards to these claims. Claims 17-19 have each been amended to depend on claim 14 rather than claim 13, thus obviating these objections as well. Although there was no formal objection, claim 18 has been amended to add a comma between "birds" and "fishes".

C. Rejections under 35 U.S.C. §103

Claims 1-7 and 14-19 are rejected under 35 U.S.C. §103 as unpatentable over Bowlin et al (6,592,623 B1) in view of Vacanti et al (6,348,069 B1). According to the Office Action, Bowlin discloses the production of engineered muscle for use as an

implant to replace dysfunctional muscle tissue. This is accomplished by culturing stem cells or muscle cells to form muscle tissue in the presence of a matrix. Vacanti discloses the production of engineered tissues by expanding bovine, ovine, or lamb muscle cells in culture, seeding the cells on a scaffold, and growing the cells to confluence.

Claims 8-13 are rejected under 35 U.S.C. §103 as unpatentable over Bowlin et al, Vacanti et al, Skaar et al (5,746,649), and Naughton et al (5,863,531). According to the Office Action, Skaar discloses that meat contains fat cells and connective tissue dispersed throughout the muscle tissue. Naughton discloses growing stromal cells with cells of another type on a support to form stromal tissue, and then inoculating the support with tissue specific cells.

Claims 1-13 and 15 have been cancelled, rendering the §103 rejection moot with regard to these claims. Applicant submits that the §103 rejection with regards to claims 14 and 16-19 has been obviated by the amendments to claim 14.

Counsel for Applicant spoke to Examiner via telephone on February 10, 2004 to discuss possible claim amendments. Counsel inquired into the feasibility of converting claim 14 from a process claim to a method of use claim, and suggested possible claim language. Examiner was amenable to the idea of converting the claim to a method of use claim, in part because no such claims had been withdrawn by Applicant's previous election. Claim 14 as amended mirrors the language suggested by the Examiner as closely as possible.


The amended version of claim 14 discloses a method of using a non-human meat product to provide nutrition to a subject, rather than describing the meat product itself or a method of making the meat product. None of the cited references teach or suggest the use of engineered muscle tissue for consumption, and Applicant knows of no prior art suggesting such a use. Thus, the method of use set forth in claim 14 appears to be non-obvious. New claims 24-29, which all depend on claim 14, disclose additional steps that may be performed when creating the non-human meat product for human consumption.

CONCLUSION

In view of the foregoing, it is submitted that the present claims are in condition for allowance. Accordingly, Applicant respectfully requests that a Notice of Allowance be issued.

Respectfully submitted,
Perkins Coie LLP

Date: February 26, 2004



Patrick D. Morris
Registration No. 53,351

Correspondence Address:

Customer No. 34055
Perkins Coie LLP
Patent – LA
P.O. Box 1208
Seattle, Washington 98111-1208
Phone: (310) 788-9900
Fax: (206) 332-7198